
BABACAR NDIAYE
LECTURE SERIES

1/17

From Manufacturing Led Export Growth to a 21st Century Inclusive Growth Strategy for Africa

A Summary Presentation by Professor
Joseph Stiglitz at the inaugural
Babacar Ndiaye Annual Lecture



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Growth to a 21st Century Inclusive
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A Summary Presentation by Professor Joseph Stiglitz at the
inaugural Babacar Ndiaye Annual Lecture

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Welcome Address by Dr Benedict Oramah, President and Chairman of the Board of Directors of the African Export – Import Bank on the Occasion of the Maiden Edition of the Babacar Ndiaye Annual Lecture Series

WASHINGTON DC, US, OCTOBER 15, 2017

*Our Guest Speaker, Professor Joseph Stiglitz, Professor of Economics,
Columbia University;*

Honourable Ministers;

Your Excellencies, Ambassadors and Members of the Diplomatic Corps;

Governors of Central Banks;

Mr Charles Boamah, Senior Vice President, African Development Bank;

Distinguished Representatives of Shareholders;

Members of the Board of Directors of the African Export-Import Bank;

Dr. Donald Kaberuka, Former President of the African Development Bank;

Executive Vice Presidents, Management and Staff of Afreximbank;

Ladies and Gentlemen of the Press;

Distinguished Ladies and Gentlemen;

On behalf of the Board of Directors, Management and Staff of the African Export-Import Bank, it is an honor and privilege for me to welcome you all to the maiden edition of the **African Export-Import Bank's Babacar Ndiaye Annual Lecture Series** being officially launched today on the sidelines of the 2017 World Bank-IMF Annual Meetings to recognize and immortalize the exceptional contributions of Dr. Babacar Ndiaye to Africa and in deed mankind. Dr. Babacar Ndiaye was the fifth President of African Development Bank, during 1985 to 1995, during which he spearheaded the establishment of the African Export – Import Bank in 1993.

Dr. Babacar Ndiaye was a visionary, consummate leader and a great institution-builder who served the continent of Africa in an exemplary way throughout his well-documented and celebrated career. The fact that so many of you have found the time to honor our invitation to this event is a testament to the caliber of leader we have assembled here to honor and celebrate. It shows how he is respected and loved even in death!

According to Frantz Fanon, author of *The Wretched of the Earth*, **“Each generation must discover its mission, fulfill it or betray it, in relative opacity.”** This insightful quote epitomized the life and times of Dr. Ndiaye. Early in his life, he discovered his mission and helped in steering his generation towards that mission. He did not only realize quite early that political independence was meaningless without economic power, he devoted his life to ensuring that Africa also gained economic independence. He used every opportunity of leadership to serve Africa.

Born during the Colonial era in 1936 in Guinea Conakry, Dr. Babacar Ndiaye built a career in finance founded on his acclaimed superior intellect, hardwork and determination. He realized early in life that finance was key to economic progress so he chose to pursue a career in development finance and reached the pinnacle of that career when he became the President of AfDB in 1985. As President, he did not sit on his palms and watch time pass-by. Indeed, he sought to use that opportunity to make an impact.

Dr. Ndiaye, engineered a massive transformation of the AfDB and the financial landscape of the continent. He oversaw the quadrupling of the equity capital of AfDB to enhance its operations and development impact and secured a triple A rating for the Bank, the first ever for an African entity. He strategically used the African Development Bank's

platform and convening power to address some of the key constraints to economic development facing the African continent, emerging as a prodigious builder of development finance institutions across the continent.

Most notably, to address the consequences of the global financial crisis of the 1980s on Africa, reduce Africa's dependence on commodities, expand intra-African trade and improve the continent's trade competitiveness, the Visionary Babacar Ndiaye championed the establishment of the African Export-Import Bank in 1993, tactically mobilizing support from African governments and the private sector as well as from several international financial institutions. President Ndiaye was also instrumental in the creation of Shelter Afrique and the African Business Roundtable, two important institutions that are positively impacting Africa today.

Dr. Babacar Ndiaye worked tirelessly to design and construct Africa's financial architecture as we know it today. He did not only build multilateral financial institutions, he strongly supported the growth of the African private sector at a time when the private sector was at best rudimentary in the continent. He engineered the creation of AfDB's private sector window, making it possible for the AfDB to start lending to the emergent private sector; he supported efforts made by Mr. Sardanis to build a pan African commercial bank, the Méridien Bank; and made it possible for AfDB to create a programme of depositing part of its liquidity with African commercial banks. Some of these may sound ordinary today but in the 1980s, they were revolutionary. Dr. Ndiaye created the new normal we all cherish today.

Of course, when we talk about Dr. Babacar Ndiaye leading the establishment of these institutions, we do not fully capture the

complexity and challenges associated with the delivery of such projects. For instance, it took more than six years from the time Dr Ndiaye conceived the idea of an African Export-Import Bank for it to become a reality. It took that long to overcome the strong opposition from a number of influential countries. An evidence of the fierce opposition he had to contend with is captured in a written memo to Dr. Ndiaye by a powerful Director, representing one non-regional member country on the Board of the African Development Bank, who wrote: **“We would not support the idea of an Afreximbank—even in principle!”** Yet another powerful Director, still from a non-regional country told President Ndiaye even after the Bank had been set up that **“the idea of establishing Afreximbank was a mistake.”**

The journey that Dr. Ndiaye undertook to create the African Export – Import Bank, was no easy one; it tested his mental fortitude and physical capabilities and made him enemies. That he persevered, overcame and delivered a bank which today stands tall as a major African multilateral, is a feat worth celebrating. His was an inspirational story which infuses courage in us as we tackle the challenges of our continent.

Sometimes we wonder what would have been the course of Africa today if Afreximbank was not created! Which international bank would have been there to support the continent in the past two years of severe commodity crisis if Afreximbank were not there to disburse over 9 billion US dollars to certain banks and central banks?; which international bank would have ignored high compliance cost to be there for African economies that have lost correspondent banking relationships?; how would Africa today be dreaming of expanding intra-African trade and export manufacturing without an Afreximbank? There was a vision realized; Dr. Ndiaye’s vision of an Afreximbank was that vision.

More than the Trade Finance Bank for Africa, the African Export-Import Bank, in the spirit of the man we are honoring, has become a vehicle for trade expansion and export diversification across Africa. I wonder what those gentlemen who opposed the Afreximbank at inception would say today, aware of Afreximbank's other contributions to Africa's trade and economic development. For instance, Cote d'Ivoire has become the world's largest processor of cocoa thanks to about 200,000 tonnes processing capacity Afreximbank helped create; Egypt has expanded its exports of manufactured goods to the rest of Africa buoyed by about 2 billion US dollars of financing supports to Egyptian companies; and Kenya Airways recent 1.9 billion US dollars fleet expansion would probably not have been possible had Afreximbank not led the effort. In addition, since inception, the Bank has:

- Disbursed an amount of about **50 billion US dollars** in support of African trade;
- **attracted about 60 billion US dollars** into strategic sectors of the African economy using various instruments;
- Expanded the continent's industrial capacities through the financing of value addition across several industries, including cocoa, coffee, cotton and tea as well as a number of metals and minerals;
- Facilitated the development of critical trade and industrial infrastructure through:
 - The addition of a **minimum of 3000 MW of energy** to the continent's energy generation;
 - Facilitated the expansion of ports infrastructure, among others.

Distinguished Ladies and Gentlemen, President Ndiaye was not only an institution builder but was someone who inspired confidence and energized young African leaders to selflessly work for economic freedom and transformation.

The institution-builder did not only help shape Africa's financial architecture as we know it today; as a courageous man, he contributed in bringing down the apartheid regime in South Africa by cutting their access to the global bonds markets; as a true African, he always put Africa first in anything he did. Distinguished Ladies and Gentlemen, Dr. Ndiaye, whom we celebrate today, was a great man; Dr. Ndiaye was a loving father and family man. Dr. Ndiaye, was very religious and God fearing.

The Afreximbank Babacar Ndiaye Lecture Series, which is planned as an annual event, is expected to provide us with the platform to honour the memory and to continuously reflect on his exceptional contributions to Africa and mankind. The Lecture Series will make it possible to sustain Dr. Ndiaye's values and vision over time and in the process help us build the next generation of leaders of even greater courage, vision and perseverance. We have also structured the Babacar Ndiaye lecture series so that it can become an important platform for

- advocating African perspectives on global issues as they relate to trade, trade finance and economic development.
- mobilizing strategic partnerships for realisation of the goals of Africa's economic growth and transformation; and
- discussing some of the innovative initiatives Afreximbank may be contemplating, taking advantage of in-depth knowledge and expertise of participants and speakers.

Distinguished Ladies and Gentlemen, the theme for today's lecture **"From Manufacturing Led Growth to a 21st Century Inclusive Growth Strategy for Africa"** aptly reflects the vision Dr. Babacar Ndiaye had for the continent. In a historical address delivered during the first General Meeting of Shareholders of Afreximbank in Abuja in 1993, Dr. Ndiaye

said and I quote: “The Bank would be expected to boost intra-African trade, especially in non-traditional and manufactured products ... Above all, Afreximbank’s support for intra-African trade will play a crucial role in the promotion of African regional integration.”

We couldn’t have found a better speaker to deliver this maiden lecture than Professor Joseph Stiglitz, a renowned economist, a recipient of the Nobel Memorial Prize in Economic Sciences in 2001 and the John Bates Clark Medal in 1979, a prestigious award he received under the age of 40 for his significant contribution to economic thoughts and theory. Prof Stiglitz, a good friend of the Bank, is someone who, in many ways, shares the vision and aspiration of Dr. Babacar Ndiaye, for Africa and developing economies as a whole.

He is among the very few renowned economists who have been leading the thinking and reflection on the issue of a more inclusive approach to globalization. His best-selling book titled “Globalization and its Discontents” refined the debate on that very important matter. The book drew heavily on Prof Stiglitz’s personal experience as chairman of the Council of Economic Advisers under Bill Clinton and chief economist at the World Bank. He has openly criticized policy prescriptions of the IMF, particularly their policies for high interest rates regimes, trade liberalization, and the liberalization of capital markets and insistence on the privatization of state assets.

More recently Professor Stiglitz has been articulating policies to reverse the process of deindustrialization of African economies which started with the implementation of World Bank-IMF-led structural adjustment

programmes in the 1980s. In 2015 he co-edited a manuscript titled: **“Industrial Policy and Economic Transformation in Africa”, which touched on that very important matter.**

In a way, Professor Stiglitz’ humanism and globally inclusive approach to industrialization is one that he shares with Dr. Babacar Ndiaye whose lifetime motivation and drive was been to enhance the integration of Africa into the global economy as a competitive player.

Distinguished Ladies and Gentlemen, we are very grateful to Prof Stiglitz for being the voice of the voiceless and for championing the cause of developing countries, including Africa and for doing so consistently over the years. Prof Stiglitz, we are pleased to have you as the keynote speaker of the maiden edition of what is indeed a history-making event. We are also pleased distinguished ladies and gentlemen, to have with us today, Dr. Donald Kaberuka, former President of AfDB. He will be commenting on Professor Stiglitz’s presentation and in the process hopefully add his own insight on the very important subject of industrialization in Africa.

Ladies and gentlemen, distinguished guests, please join me in welcoming Professor Joseph Stiglitz.

Thank you all for your attention.

Dr. Benedict O. ORAMAH

President and Chairman of the Board of Directors

The African Export-Import Bank

Washington DC, USA, October 15, 2017



Foreword

President John F. Kennedy once said, and I quote “A nation or an entity reveals itself not only by the men it produces, but also by the men it honors, the men it remembers ...”. The Babacar Ndiaye Annual Lecture Series instituted by the African Export-Import Bank in October 2017 provides the opportunity for Africa and the world to celebrate the life and immortalize the vision and exceptional contributions of Dr. Babacar Ndiaye to Africa and indeed, mankind. Throughout his remarkable career Dr. Ndiaye served the continent of Africa in an exemplary way. As a great institution builder, he oversaw the transformation of the African Development Bank as its fifth President (1985-1995) during the tumultuous era of sovereign debt crisis and structural adjustment. He was instrumental in the creation of several continental institutions, including Shelter Afrique, the African Business Roundtable, and the African Export-Import Bank. These institutions have over the years made tremendous positive impact on Africa’s development. For instance, Afreximbank has over the last 25 years disbursed over US\$50 billion in support of African trade and attracted more than US\$60 billion into strategic sectors of the African economy. It has also been a major instrument for the pursuit of the goal of export and market diversification by many African economies.

The Afreximbank Babacar Ndiaye Annual Lecture series has the ambition to become a global platform for advocating African perspectives on world issues and for mobilizing international support and partnerships for the transformation of African economies and their effective integration into the global economy. The Annual Lecture provides the opportunity for Afreximbank and African leaders to engage eminent

experts on finance, trade and economic development, while at the same time articulating Africa's views at the global level. The World Bank-IMF Annual Meetings which are the world's largest gatherings of global financiers and development experts provide the ideal platform for maximum impact in the early years of the series.

This inaugural lecture delivered by Professor Joseph Stiglitz, Columbia University Professor and Nobel Laureate in Economics on the sidelines of the 2017 edition of the World Bank-IMF Annual Meetings on the topic "From Manufacturing-Led Export Growth to a 21st Century Inclusive Growth Strategy for Africa" aptly reflects the vision that Dr. Babacar Ndiaye had for the African continent. In a historical address delivered during the first General Meeting of Shareholders of Afreximbank in Abuja in 1993, Dr Ndiaye said "The Bank would be expected to boost intra-African trade, especially in non-traditional and manufactured products ... Above all, Afreximbank's support for intra-African trade will play a crucial role in the promotion of African regional integration."

This first lecture provides the opportunity to deepen our knowledge and understanding of the impact of technological changes on the effectiveness of export-led growth strategies for economic transformation. It offers valuable insights into policy options for Africa at a time when African leaders are promoting development models

which emphasize the diversification of sources of growth and structural transformation. Professor Stiglitz argues that successful development policies in a context of rapidly changing technological environment and rise of innovation-led growth models will need to be explicitly multi-pronged, simultaneously addressing multiple development challenges and objectives. He further stresses that a coordinated developmental strategy that includes agriculture, manufacturing, mining, and the service sector will be more effective for Africa and could produce the same results and development outcomes that traditional export-led manufacturing strategies delivered in other regions decades earlier.

I enjoyed the insightful and thought-provoking vision articulated by Professor Stiglitz during the inaugural Babacar Ndiaye Annual Lecture Series. For decades Professor Stiglitz has been promoting a more inclusive approach to globalization and I would like to thank him for his sustained contribution to the development of Africa and for honoring our invitation. The compelling arguments and views he articulated are summarized in this paper and I hope that you will find them as insightful and relevant as I did.

Dr. Benedict O. ORAMAH

President & Chairman of the Board

The African Export-Import Bank

Export-led growth model behind 20th century growth miracles

- Unprecedented growth in East Asia—closing the gap in income per capita/standards of living with advanced countries
- Major shift from import substitution model that prevailed earlier
- Deconstructing success
 - Open economy allowed one to avoid complexity of material balance equations—all one had to have was enough foreign exchange
 - Export led growth generated necessary foreign exchange
 - Didn't need to generate demand to absorb new supply
 - No need to worry about demand constraints
 - Flexible and correctly managed exchange rate, open economy, and “attentive” producers suffice to absorb supply
- That model won't be working in the future in the way that it did in the past



I.

Deconstructing success

I. Deconstructing success

- Exports provided basis for learning
 - What separates developed and less developed countries is a gap in knowledge
 - Transfer of technology could be accomplished in numerous ways (buying technology, FDI)
 - Important spillovers to other industries
 - Institutional spillovers (e.g. education) even to other sectors
 - Demand for educated individuals—of benefit elsewhere in the economy
- Exports provided basis for tax revenues
 - Finance needed for government expenditures—infrastructure, education, technology
 - Hard to tax informal sector

Deconstructing success of export-led growth

- Generated employment in urban sector—key in supporting structural transformation
 - Generated jobs for new entrants into the labor force
- Mechanisms for promoting exports
 - Access to credit at near commercial rates—provided incentives for entrepreneurs
 - Limited direct support
 - Variety of industrial policy instruments
- Natural system of accountability
 - Successful firms proved profitable



II.

The (relative) decline of manufacturing and its implications

II. The (relative) decline of manufacturing and its implications

- Victim of own success: productivity exceeds rate of increase in demand (share of manufacturing in GDP declining everywhere as next slide shows)
 - Some vertical disintegration of service components of manufacturing gave appearance of more rapid disappearance of jobs
 - Vertical disintegration can have real consequences (e.g. for wages and flows of knowledge)
- Even with emerging markets taking larger share of manufacturing jobs, and with shift of jobs from China to Africa, new manufacturing jobs will only absorb a fraction of new entrants into labor force
 - Can still have impacts disproportionate to size
 - Countries may have a natural comparative advantage in some niches (or in some cases, even be able to create a comparative advantage)
 - But unlikely to have impacts that manufacturing export led growth had in China and East Asia

Manufacturing Share of GDP (%)

	2000	2015
World	19	15
E. Asia & Pacific	25	23
ECA	19	16
LAC	17	14
North America	16	12
South Asia	15	16
Sub-Saharan Africa	11	11
Low-Income	10	8
Lower Middle Income	17	16
Upper Middle Income	24	21
High Income	18	15

Source: WDI

Industrialization Trends and Africa

- The share of manufacturing in GDP was once so highly correlated with per capita income that the IMF used the term “Industrial countries” to refer to high income countries until some 15 or so years ago
- The relationship became an inverted U shaped one some 2 decades or so ago
- And more recently the height of the inverted U has been declining, i.e. the peak level of income at which manufacturing’s share begins to shrink has been falling



- But Sub-Saharan Africa began its deindustrialization much too prematurely and rapidly : manufacturing's share peaked in 1977 at about 17% and then declined almost continuously: 10% by 2000 and 11% in 2015.
- This “underindustrialization” of SSA should mean more scope for catch-up industrialization notwithstanding the headwinds posed by global technological trends



III.

A new framework for
learning-led growth

III. A new framework for learning-led growth

- Based on “deconstructing” export-led growth
- Multifaceted growth strategy, with different facets reflecting different aspects of manufacturing export-led growth
 - Export-led manufacturing naturally combined structural transformation and urbanization, movement to a learning economy, openness that meant one could simply focus on foreign exchange constraint (ensuring that one had the foreign exchange one needed), and job creation for new entrants into the labor force to maintain reasonably high employment
 - May need to combine multiple strategies
 - Manufacturing—more directed, more limited, where possible, taking advantage of natural advantage (mineral resources)
 - Challenge for job creation will be greater because of AI
 - Competition for low skilled manufacturing may result in a race to bottom—need to be careful in giving tax breaks
 - Agriculture—basis of employment, but can be restructured in ways that are more dynamic, with more learning, learning to learn, a kind of transformation in situ

- Mining and oil—important for foreign exchange (maximize revenues, taking advantage as much as possible of spillovers)

- Services—will be the growth sector of the future but in Africa agriculture also has enormous potential both in its own right and by stimulating the manufacturing and service sectors as ACET’s Africa Transformation Report 2017 released earlier this week argues (see below)
 - Understand implications
 - Understand how to maximize growth potential and how to manage transition

- Government may need to take a more active role if there is to be successful structural transformation
 - Shadow prices for learning, learning spillovers, jobs, and foreign exchange may also entail deviations from market-only solutions

Agriculture-led Economic Transformation

- The African Center for Economic Transformation’s 2nd major report released on Oct. 10 is timely and welcome.

- Argues that for many African countries: “agriculture presents the easiest path to industrialization and economic transformation. Increasing productivity and output in a modern agricultural sector would, beyond improving food security and the balance of payments (through reduced food imports and increased exports) Sustain agro-processing, the manufacturing of agricultural inputs, and a host of services upstream and downstream from farms, creating employment and boosting incomes across the economy.”



IV.

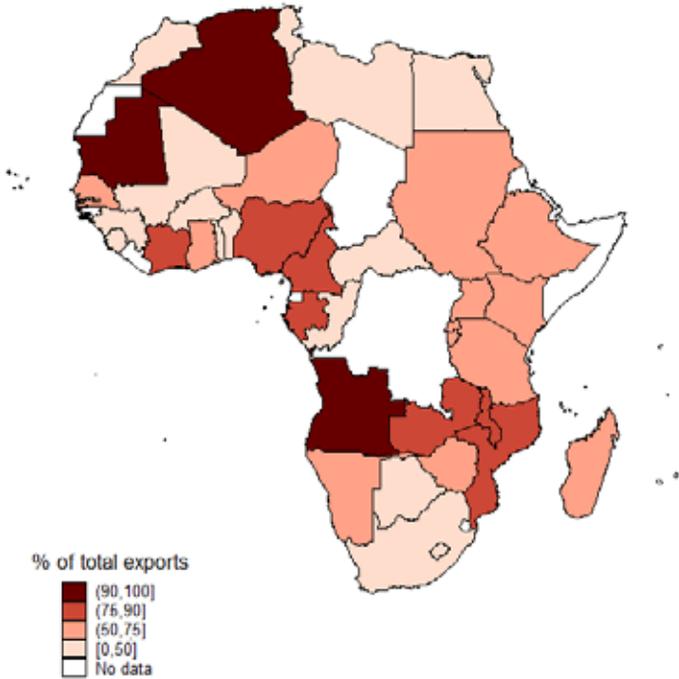
Review of Issues particularly
germane to Africa

IV. Review of Issues particularly germane to Africa

- Exports remain highly dependent on commodities—from which learning benefits may be limited, making modernization transition all the more difficult
- Increasing reliance on trade with China may also be problematic
 - Continuing colonial tradition of exporting low value added commodities?
- Low education levels in many African countries presents particular challenge to modernization
 - Increases importance of learning
 - Opportunities for job creation in education sector
- Deindustrialization (as a result of structural adjustment policies) puts Africa at a disadvantage at the moment
 - But again provides opportunities for expansion
- Jobs will be a key issue: major shortfall of jobs
 - Any development strategy must address this issue

Low Diversification of exports

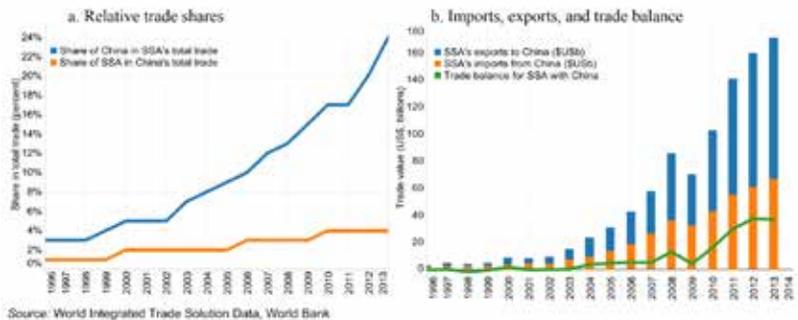
Gross commodity exports
Africa- Year 2015



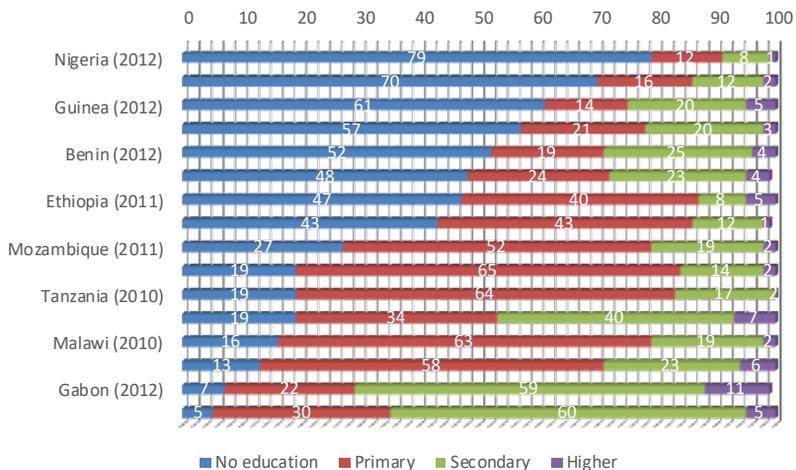
Source: WTO

Trade with China

Figure 1 Trade between China and SSA



Distribution of active population according to education level



Note: Only countries with data after 2009 are included. Number are in percent.

Source: Demographic and Health Survey, reproduced from Chevallier and Le Goff 2014.

Deindustrialization

Value added, employment, and relative labor productivity by sector

Sector	Sectoral Shares								Relative			
	Value Added				Employment				Productivity Levels			
	1960	1975	1990	2010	1960	1975	1990	2010	1960	1975	1990	2010
Agriculture	37.6	29.2	24.9	22.4	72.7	66.0	61.6	49.8	0.5	0.4	0.4	0.4
Industry	24.3	30.0	32.6	27.8	9.3	13.1	14.3	13.4	4.4	3.7	3.5	2.6
Mining	8.1	6.2	11.2	8.9	1.7	1.5	1.5	0.9	15.7	22.4	23.3	19.5
Manufacturing	9.2	14.7	14.0	10.1	4.7	7.8	8.9	8.3	2.5	2.8	2.4	1.6
Other Industry	7.1	9.2	7.3	8.9	3.0	3.8	3.9	4.2	8.5	5.8	5.3	2.9
Services	38.1	40.7	42.6	49.8	18.0	20.9	24.1	36.8	2.7	2.5	2.4	1.6
Total Economy	100	100	100	100	100	100	100	100	1.0	1.0	1.0	1.0

Note: Table shows GDP, Employment, and relative productivity levels in Sub-Saharan Africa. Relative productivity level is the ratio of the sector and total economy levels.

Source: deVries, Timmer, and deVries (2013): Structural transformation in Africa: Static Gains, Dynamic Losses. <http://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1041&context=ijad>

Deindustrialization

Value added by sectors (% of GDP)

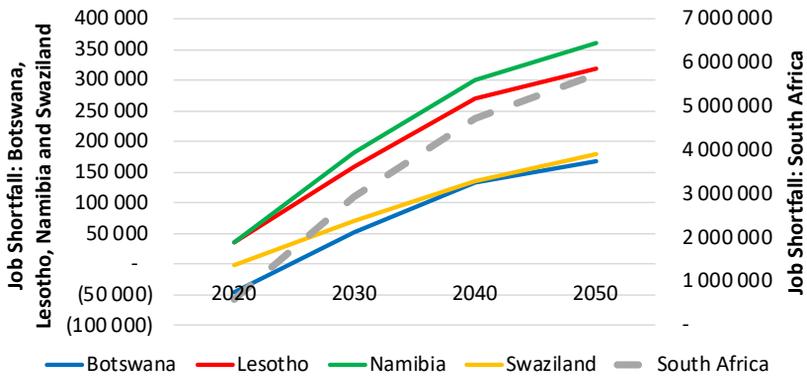
	1981	1990	2000	2010	2016
Agriculture	23.7	23.4	19.6	17.8	17.9
Industry	35.4	33.7	36.5	27.4	23.7
Manufacturing	15.0	13.5	11.3	10.3	10.5
Services	42.1	41.8	43.9	54.8	58.3

Source: World Bank Development Indicator

Demographic Explosion: Dividend or Disaster?

- By 2100 World's population projected to rise by 4 billion of which 3.2 billion in Africa
- Africa's working age population to rise by 2.1 billion or more than the global increase of 2 billion
- Africa likely to need to generate roughly 500 million jobs over the next 20-25 years to absorb the stock of un/under employed and the increase in the labor force
- Whether and how to make this a demographic dividend is of vital importance not just to Africa but the world
- Complicated not only by the relative decline of manufacturing but also its falling labor intensity

Projected Job Shortfall in selected countries



Note: Projected Job Shortfall (difference between the number of jobs needed to keep unemployment stable at today's levels and the projected number of jobs available if job creation continues at the same rate as seen in the recent past).

Source: The World Bank.



V.

Key elements of a
development strategy

V. Key elements of a development strategy

Manufacturing

- Niche manufacturing/limited import substitution
 - Emerging markets can undertake research and become leaders in particular sectors—Brazil and China illustrate
 - “Shadow prices” may lead to some protection for jobs in the SR, some encouragement because of learning, and fix benefits in the medium to long run
- Pushing manufacturing further towards more complex products
- Strengthening links between “modernized” agriculture and manufacturing
- Further steps to maximize learning from industrialization by
 - South-South cooperation—expanding markets
 - Taking advantage of natural advantages—natural resources
 - Managed protectionism—helping “infant economies grow”
 - Import substitution unfairly got bad name
 - Balancing carefully costs against benefits, constant reassessment
 - Declining future potential role changed calculus
 - Trump has changed calculus
 - Internet has changed calculus
 - The urgent need for jobs along the transition path has changed calculus

- Balanced education—not just emphasis on primary education
- Advance complexity—not context with current comparative advantage

Natural resources

- Standard lessons of resource curse have not yet been learned by most countries
 - Need to maximize revenues from natural resources from well designed auctions and contracts
 - It may be necessary to auction off different parts of the production process, rather than to have a bid for a “manager”
 - Contracts need to be complemented by excess profit taxes
 - Countries need to be careful not to sign investment agreements that circumscribe ability to change taxes and regulations
 - Those that have signed such agreements should exit or renegotiate (e.g. South Africa)
 - Even with these agreements, it may be preferable to change contracts (e.g. Israel)
 - Sovereign wealth fund—both to manage cyclical variability and to prevent exchange rate appreciation
 - Manage exchange rate for competitiveness in other sectors
- New lesson: industrial policies can exploit a variety of forward, backward, and horizontal links
 - Possible losses in SR in return for long run learning

- But careful appraisal of trade-offs required
- Absence of current spillovers is not necessarily evidence that there aren't potentially long run profitable linkages.

Agriculture

- Need robust agricultural sector to provide full employment, including by stimulating manufacturing and services
 - Seek to add learning dimension to agriculture and other sectors
 - Modern agriculture can be very “advanced”
 - Focus on non-labor saving innovations—better crop mix, better fertilizers
 - Focus on “learning”—developing skills useful in modern economy
 - Transforming farming from traditional practices to modern farming
- To reduce need for foreign exchange—using it for areas where it cannot be replaced

Service sector

Move to service sector may have many implications

- Smaller production units
 - Part of explanation of seemingly lower productivity growth (Baumol's disease)
 - Some may be measurement problem
- But not inevitable
 - Less R&D: more need for cooperative R&D, government R&D

- Larger productivity differences across firms
 - Increased need for government to push “creating a learning society” to reduce productivity differences
- Many services can be more easily inserted into the global economy through internet
 - Especially if there can be quality certification, either through peer monitoring or certification services
 - Increasing need for skills training, including languages

Service sector—more market power, more inequality

- High levels of product differentiation, links to oligopoly manufacturing may lead to more market power
 - Profits from servicing Deere Tractors, not manufacturing them
 - Location matters more—natural product differentiation (monopolistic competition)
- Compensation more linked to individual productivity, greater differences in productivity within and between firms, leading to greater inequality



VI.

Rethinking role of government

VI. Rethinking role of government

- Need for government in structural transformation, especially in developing countries
 - Important resource constraints—costly to move from “old economy” (jobs, sectors, technologies) to new; imperfections of capital markets become particularly evident in process of transformation (assets of those in “old economy” diminished, so they don’t have resources to make necessary investments or provide collateral)
 - Important learning externalities
 - Evident even in earlier Western transformation from agriculture to services
 - Even more in service sector economy—closing knowledge gap between small production units

Role of government in transition to service sector economy

- Government plays an important role in many key service sectors (though less than in some other regions)
 - Education
 - Health
 - Will need to expand that role
- Housing services
 - Process of urbanization will require large investments
 - With large job creation potential
 - Government will need to take a more active role
 - Including in planning “livable cities”—important part of well-being
- Agricultural Services
 - Input supply
 - Extension
 - Marketing
 - Finance

Taxes and money

- Should lead to greater need for progressive taxation (to provide for increased need for collective goods, including common research), but dispersed production may lead to decreased ability to collect taxation
- Modern technology allows creation of an economy based totally on e-money—currency is no longer needed
 - With e-money, income can be better traced and a progressive tax imposed
- In absence of e-money (current system), may need to impose progressive indirect system
 - Heavy tax on goods purchased by wealthy, like expensive cars, expensive foods, especially when imported, large homes
 - Can be made WTO compliant in most countries, since much of the specific goods purchased by wealthy are imported (tax on luxury biscuits vs. biscuits eaten by ordinary individuals) and can be integrated into industrial policy (import substitution)
 - Decline in manufacturing will necessitate putting further burden on environmental taxes (taxing bad things rather than good things) and on taxing land and natural resources (taxing goods that are observable and in inelastic supply)

Rethinking industrial policy

- Some service sectors are more amenable to learning
- Some learning in specific services has more spillovers to others
- General principles of industrial policies still apply (including for agriculture)
- Need to identify “learning” and “learning spillover” service sectors and agricultural activities
- These can have much of the benefits of the learning provided by manufacturing



VII.

Concluding remarks:
Reformulating development
thinking

VII. Concluding remarks: Reformulating development thinking

- Success in development over past 60 years was greater than anyone anticipated—contrast Myrdal's predictions for Asia with what happened
- There is an enormous gap in knowledge, as well as in resources, that has to be closed
- Most of the advanced countries are engaged in service sector—80% or more
 - So if there are disparities in standards of living, it relates to productivity in these service sectors
 - There are huge disparities in productivities within countries, even greater between countries

Reformulating development thinking

- The basis of the success of growth over past half century was export-led growth
 - We have deconstructed what enabled manufacturing to provide this growth spurt, this structural transformation
 - It won't be able to do so in the future to anything like that extent
 - There has to be another strategy—that performs some of the essential roles that manufacturing export-led development did

Reformulating development thinking

- Successful development policy will need to be explicitly more multi-pronged, addressing separate “challenges” that manufacturing sector addressed simultaneously
- We have shown how a coordinated {Agriculture, Manufacturing, Mining, Service Sector} strategy has the prospect of attaining the same success of the old manufacturing export-led strategy
- Government will need to play an important role in the new structural transformation towards a modern economy—which will not in general be a manufacturing economy but a modern services economy and in Africa's next phase of development modern agriculture will also be vital

Some references

African Center for Economic Transformation, *African Transformation Report 2017: Agriculture Powering Africa's Economic Transformation* Accra and Washington DC: ACET 2017 <www.acetforafrica.org>.

Delli Gatti, D., M. Gallegati, B. Greenwald, A. Russo, and J. E. Stiglitz, "Mobility Constraints, Productivity Trends, and Extended Crises," *Journal of Economic Behavior & Organization*, 83(3): 375–393.

_____»Sectoral Imbalances and Long Run Crises,» in *The Global Macro Economy and Finance*, F. Allen, M. Aoki, J.-P. Fitoussi, N. Kiyotaki, R. Gordon, and J.E. Stiglitz, eds., IEA Conference Volume No. 150-III, Houndmills, UK and New York: Palgrave, pp. 61-97.

Greenwald, B. and J.E. Stiglitz, *Creating a Learning Society: A New Approach to Growth, Development, and Social Progress*, New York: Columbia University Press, 2014. Reader's Edition published 2015.

_____“Helping Infant Economies Grow: Foundations of Trade Policies for Developing Countries,” *American Economic Review: AEA Papers and Proceedings*, Vol. 96, No. 2, May 2006, pp. 141-146.

_____“Learning and Industrial Policy: Implications for Africa,” in *The Industrial Policy Revolution II: Africa in the 21st Century*, Joseph E. Stiglitz, Justin Yifu Lin, and Ebrahim Patel (eds.), Houndmills, UK and New York: Palgrave Macmillan, pp. 25-49.

Noman, A. and J.E. Stiglitz, "Introduction and Overview: Economic Transformation and Learning, Industrial and Technology Policies in Africa" in *Industrial Policy and Economic Transformation in Africa*, Akbar Noman and Joseph E. Stiglitz (eds.), New York: Columbia University Press, 2015, pp. 1-29.



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